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Sato

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[54] RECEPTION TIMING DETECTION CIRCUIT OF CDMA RECEIVER AND DETECTION METHOD

[75] Inventor: Toshifumi Sato, Tokyo, Japan

[73] Assignee: NEC Corporation, Japan

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Primary Examiner—Hassan Kizou

Assistant Examiner—Afsar M. Qureshi

Attorney, Agent, or Firm—Ostrolenk, Faber, Gerb, Soffen, LLP

[57] ABSTRACT

A reception timing detection circuit of a CDMA receiver comprises an A/D converter **101** for obtaining a digital reception signal S, a correlator **102** for obtaining a cross-correlation between the digital reception signal S and a known signal series periodically within a predetermined lag, an interpolation filter **103** for re-sampling the signal R output from the correlator **102** at a frequency higher than a sampling frequency for the A/D converter **101**, a power calculation section **104** for obtaining the re-sampled cross-correlation signal power P, an averaging section **105** for averaging the cross-correlation signal power P over a plurality of cycles, and a peak detection section **106** for obtaining a peak P_{opt} of the averaged cross-correlation signal power P and determining an optimum reception timing τ_{opt} .

16 Claims, 9 Drawing Sheets

